

# Preeclampsia May Compound Growth Restriction

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PRAGUE — Preeclampsia may significantly worsen some perinatal outcomes in growth-restricted infants, according to a review of infants born to mothers with and without preeclampsia.

In a study of growth-restricted neonates born at a gestational age older than 24 weeks, 25 infants whose mothers had preeclampsia had significantly worse psy-

chomotor development on the Ages and Stages Questionnaire than did 46 infants born to mothers who did not have preeclampsia, Dr. Elisenda Eixarch reported in a poster session at the 20th European Congress of Perinatal Medicine.

In those neurologic evaluations, which were prospectively evaluated at 24 months, the children born to preeclamptic mothers scored at a significantly lower centile on the fine motor and problem-solving dimensions than did children of non-

preeclamptic mothers. The other three dimensions of the questionnaire (communication, gross motor, and personal-social) were worse in children of mothers with preeclampsia than in those of mothers without preeclampsia but not significantly so, according to Dr. Eixarch of the department of obstetrics and gynecology at the Hospital Clinic, Barcelona.

All of the infants in the study were estimated to have a birth weight below the 10th percentile.

Dr. Eixarch and her colleagues adjusted the analysis of each dimension of the questionnaire for birth weight and gestational age, because those two variables were significantly higher among infants born to mothers without preeclampsia than among those born to mothers with preeclampsia.

Compared with infants born to non-preeclamptic mothers, the babies who had preeclamptic mothers had significantly higher rates of cesarean section (36% vs. 70%) and "significant neonatal neurological morbidity" (3% vs. 13%)—that is, seizures, grade 2 or 3 intraventricular hemorrhage, or hypoxic encephalopathy—and a significantly longer length of stay in the neonatal ICU (5.4 days vs. 18.3 days). ■

## ADVERTISEMENT

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### Substance P/NK<sub>1</sub> receptor emetic pathway—centrally mediated

The primary mechanism of the substance P/NK<sub>1</sub> receptor pathway appears to be central, occurring primarily at sites associated with the brainstem vomiting center.<sup>7-9</sup> By acting at the central neurocircuitry associated with the brainstem vomiting center, the substance P/NK<sub>1</sub> receptor pathway occurs within the final common neuropathway regulating emesis.<sup>8</sup>

### Targeting various emetic pathways for optimal PONV management

Evidence suggests that the order in which antiemetics are given may influence the overall efficacy of a PONV management plan. In 2 separate studies, each involving more than 2,000 patients, retreatment with the same class of drug often was not effective in patients who failed prophylaxis.<sup>10,11</sup> Therefore, as reflected in current consensus guidelines, it is important to consider using agents that act at different neurotransmitter receptor sites for prophylaxis and treatment of breakthrough PONV.<sup>12</sup>

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This is the third in a series  
of 3 articles discussing PONV.

## Operative Delivery Not Tied to Risk of Cervical Laceration

WASHINGTON — The use of forceps and vacuum did not increase the risk for cervical laceration among patients who had vaginal deliveries performed at a large community hospital, according to a poster presented at the annual meeting of the American College of Obstetricians and Gynecologists.

However, cervical cerclage and induction of labor appeared to be risk factors for cervical laceration in these deliveries, wrote Dr. Reshma Parikh and his colleagues at St. Luke's Hospital and Health Network in Bethlehem, Pa. The researchers performed a retrospective analysis of all vaginal deliveries at their large community hospital over a 5-year period.

They analyzed a number of suspected risk factors for cervical laceration including parity, body mass index, cervical cerclage, prior cervical procedures, induction of labor, duration of second stage, mode of delivery, and infant weight. Of the 16,931 vaginal deliveries performed at the hospital, 32 cervical lacerations were reported. Cervical cerclage was associated with an 11.5-fold increase in relative risk in cervical laceration, and induction of labor was associated with a threefold increase in relative risk, the researchers reported.

However, the researchers noted that they were surprised to find that operative delivery, using either forceps or vacuum, did not appear to be a risk factor for cervical laceration in the study population. In addition, none of the other factors examined were found to significantly increase risk for cervical laceration.

—Mary Ellen Schneider